

## REMARKS

This paper is responsive to any paper(s) indicated above, and is responsive in any other manner indicated below.

## PENDING CLAIMS

Claims 1-13 were pending, under consideration and subjected to examination in the Office Action. Appropriate claims have been amended, canceled and/or added (without prejudice or disclaimer) in order to adjust a clarity and/or focus of Applicant's claimed invention. That is, such changes are unrelated to any prior art or scope adjustment and are simply refocused claims in which Applicant is present interested. At entry of this paper, Claims 1-3, 5, 7-9, 11, 13-21 will be pending for further consideration and examination in the application.

## REJECTION UNDER '112, 2ND PAR. - TRAVERSED

Claims 1-8 and 13 have been rejected under 35 USC '112, second paragraph, as being indefinite for the concerns listed within the section numbered "3" beginning on page 2 of the Office Action. Applicant respectfully traverses. An object of Applicant's disclosed and claimed invention is to automatically generate **compileable** test programs which can be used **to test a compiler** being developed.

That is, Applicant's disclosed and claimed invention is **not concerned** with automatically generating a **logical/functional test program** which will execute toward a meaningful result, but instead is concerned with automatically generating test programs which **will compile properly when compiled with a valid compiler**.

**Each of Applicant's cells is independently compileable**, and accordingly, any

random selection/ordering of Applicant's cells is **likewise compileable**. In short, the Office Action 112 comments regarding "missing steps", "logical sequence", "invalid piece of code", etc., are irrelevant with respect to the present invention, as Applicant's invention is directed toward testing the validity of compiling, and is not directed toward generating valid pieces of code.

In addition to the above traversal comments, the following additional comments supplied from Applicant's foreign patent representative, are also respectfully submitted.

A sub-procedural description or a program cell stated in the present invention concerning claims 1, 5, 9, 11 and 13, is one that contains a data input portion, executable statements or a function call, and a data output portion. The program cell may be compiled and executed on a stand-alone basis, **independent of other program cells**. Because of cell independency, the program cells are randomly selected from a pool of program cells and combined in any order, to form a test program would not cause a compiling error if compiler used is a right one (i.e., the compiler itself operates properly). A series of thus combined program cells would be compiled and executed in order in accordance with its sequence, if the statements for the stand-alone execution are made ineffective when compiling the test program. Therefore, between two combined program cells in the present invention, there is none of the missing steps the Examiner has pointed out.

Whether the test program thus created outputs as a result something meaningful is another story. Even if the test program fails to produce a significant result, it functions sufficient enough for validity testing of the compiler. That is, the compiler would correctly compile such test program to produce an object code,

whether the test program has a meaningful sequence or not, if the test program complies with the language standard. That sort of unproductive test program would cause an improperly engineered compiler to operate in such a manner as its designers do not assume, making it possible to unexpectedly reveal the bugs hiding in the compiler. The present invention enables the users to use basic cells, control cells and function cells to create a test program with a complex structure and complicated behavior, effective enough to test the compiler.

As the foregoing is believed to have addressed all '112 second paragraph concerns, reconsideration and withdrawal of the '112 second paragraph rejection are respectfully requested.

#### **REJECTIONS UNDER 35 USC '102 - TRAVERSED**

The 35 USC '102 rejection of claims 9-12 as being anticipated by Blume (U.S. Patent 6,223,337) is respectfully traversed.

All descriptions of Applicant's disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated hereat by reference. Further, all Office Action statements regarding the prior art rejections are respectfully traversed. As additional arguments, Applicant respectfully submits the following.

In order to properly support a '102 anticipatory-type rejection, any applied art reference must disclose each and every limitation of any rejected claim. The applied art does not adequately support a '102 anticipatory-type rejection because, at

minimum, such applied art does not disclose (or suggest) the following discussed limitations of Applicant's claims.

More particularly, at minimum, Blume would not have anticipated (or suggested), Applicant's claimed arrangement: "wherein the sub-procedural description includes ... **a control-sub-procedural description that describes how to repeat a procedure, a control sub-procedural description that describes how to select a procedure, and a function sub-procedural description that describes statements to call a function**". That is, Blume's "segments" appear directed only toward simplistic single input/output variable algorithms.

In addition to the above traversal comments, the following additional comments supplied from Applicant's foreign patent representative, are also respectfully submitted.

The present invention concerning claims 9 and 11 is to compare a test result obtained by using a test target compiler with an expected result obtained by using a proven compiler, to see if the test target compiler produces the expected result through the use of the same test program as the one used for the proven compiler.

Regarding the applied Blume reference, a compiler is equipped with an optimizing option, and, by using the option, the execution time of the produced object code becomes, for example, shorter than that of the object code without the option. However, under certain conditions, an erroneous optimization leads to an operation different from the operation of object code without the option, revealing a bug of the optimizing option. Blume discloses a tool to test an optimizing option of a compiler.

The present invention is intended to test a test target compiler by comparing a test result through the use of the compiler with an expected result, through the use of a proven compiler. The test target compiler covers the whole functions of the test target compiler, and is not limited to an optimizing option. Therefore, the present invention has entirely different thought from the Blume's test for an optimizing option.

As a result of all of the foregoing, it is respectfully submitted that the applied art would not support a '102 anticipatory-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such '102 rejections, and express written allowance of all of the rejected claims, are respectfully requested.

#### **EXAMINER INVITED TO TELEPHONE**

The Examiner is herein invited to telephone the undersigned attorneys at the local Washington, D.C. area telephone number of 703/312-6600 for discussing any Examiner's Amendments or other suggested actions for accelerating prosecution and moving the present application to allowance.

#### **RESERVATION OF RIGHTS**

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer. That is, any above statements, or any present amendment or cancellation of claims (all made without prejudice or disclaimer), should not be taken as an indication or admission that any objection/rejection was valid, or as a disclaimer of any scope or subject matter.

Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, i.e., Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

### CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are now in condition for allowance.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR '1.136. Authorization is herein given to charge any shortage in the fees, including extension of time fees and excess claim fees, to Deposit Account No. 01-2135 (Case No. 520.43411X00) and please credit any excess fees to such deposit account.

Based upon all of the foregoing, allowance of all presently-pending claims is respectfully requested.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



Paul J. Skwierawski  
Registration No. 32,173